



# WEB SURFING SCIENCE!

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Part I: Machines

## Part II: Pulleys

## Part III: Simple Machines

## Part IV: Identifying Simple Machines

### Part I: Machines

Web Address: <http://idahoptv.org/dialogue4kids/season7/simplemachines/facts.cfm>

1. In science, what is considered work?

---

---

2. What are the six basic types of simple machines?

---

---

3. What is an incline plane and what does it allow you to do?

---

---

4. What is a pulley and how does it help you do work?

---

---



### Part II: Inclined Plane

Web Address: <http://phet.colorado.edu/en/simulation/the-ramp>

1. Compare the amount of force it takes to push the crate up the ramp when the ramp is set at different angles.

Angle	Applied Force	Height Reached	Distance
10.5°			
5.2°			
2.1°			

2. What is the result of increasing the angle of the ramp?

---



---

### Part III: Pulley

Web Address: <http://library.thinkquest.org/27948/pulley.html>

1. Why is it good to have a mechanical advantage?
2. Compare the amount of force required to lift the weight when the number of pulleys is changed.

Number of pulleys	Amount of force required

3. How does the number of pulleys affect the amount of force needed to lift an object?



### Part IV: Identifying Simple Machines

Web Address: <http://www.edheads.org/activities/simple-machines/>

1. Take a tour of the house first, then tour the tool shed.

